

Trees & Youth in the City:

Research on Affects of Urban
Forestry Work Experiences on
Inner City, Underserved
Adolescents

Kathleen Wolf, Ph.D., Univ of Washington, Seattle

Trees & Positive Youth Development

Sponsors & Collaborators:

US Forest Service

National Urban & Community Forestry
Advisory Council

EarthCorps

University of Washington



Research Questions

- Do adolescents gain positive development benefits from urban nature program experiences?
- What is the relationship of adolescent nature program experience and career choice?



Research Phases

- Phase I: Interviews & Surveys
 - youth program “veterans” in Seattle
 - urban forestry professionals - U.S.
- Phase II: Pre/post evaluations
 - youth programs - 8 across U.S.
- Phase III: Pre/post evaluations
 - youth programs - Seattle



Phase II Research

- Pre/post evaluations
 - youth programs - 8 across U.S.



Evaluation Methods

- Summer 2005
- Youth Programs - Seattle, national
- Pre & Post Tests
- Survey - developmental concepts, demographics, 10 pages
- Statistical data analysis



Youth Sampling

- 2005 - 8 programs, all U.S., 119 youth
- Youth aged 15-19 (12-19 actual)
- Program of 60+ hours
- Activity - restoration of natural areas and/or tree planting
- Additional activity - education, leadership development, job skills



EarthCorps
LOCAL RESTORATION · GLOBAL LEADERSHIP







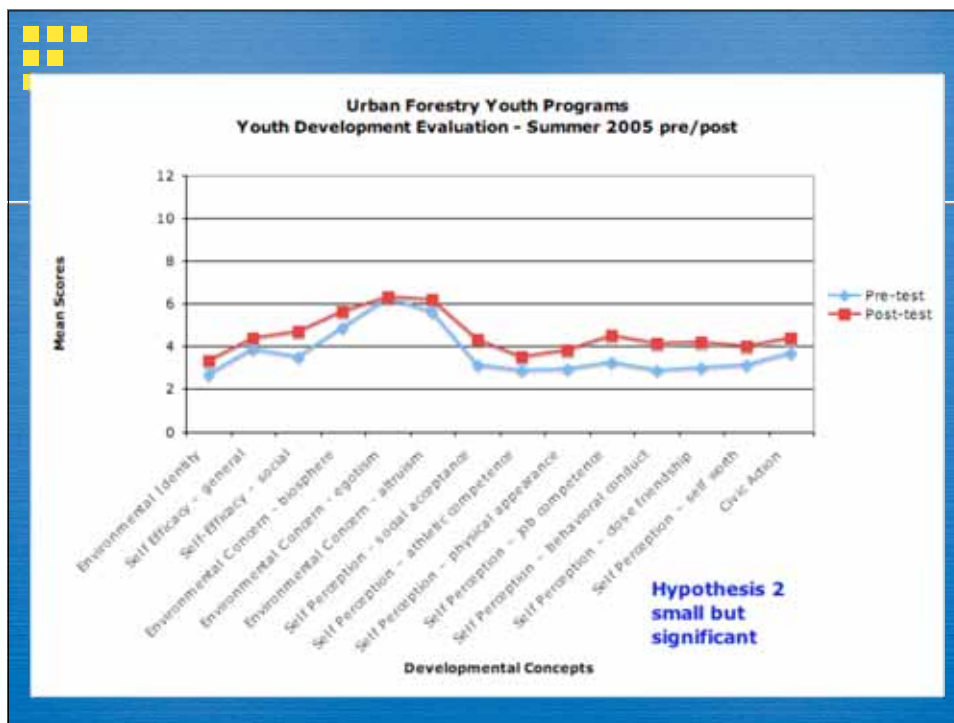
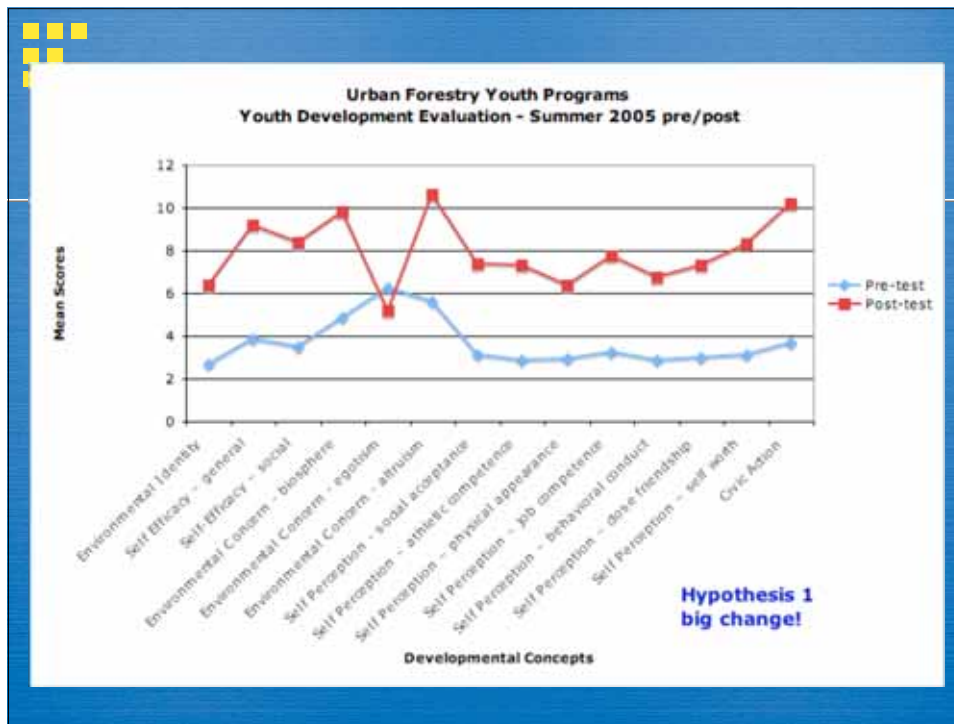
Developmental Concepts

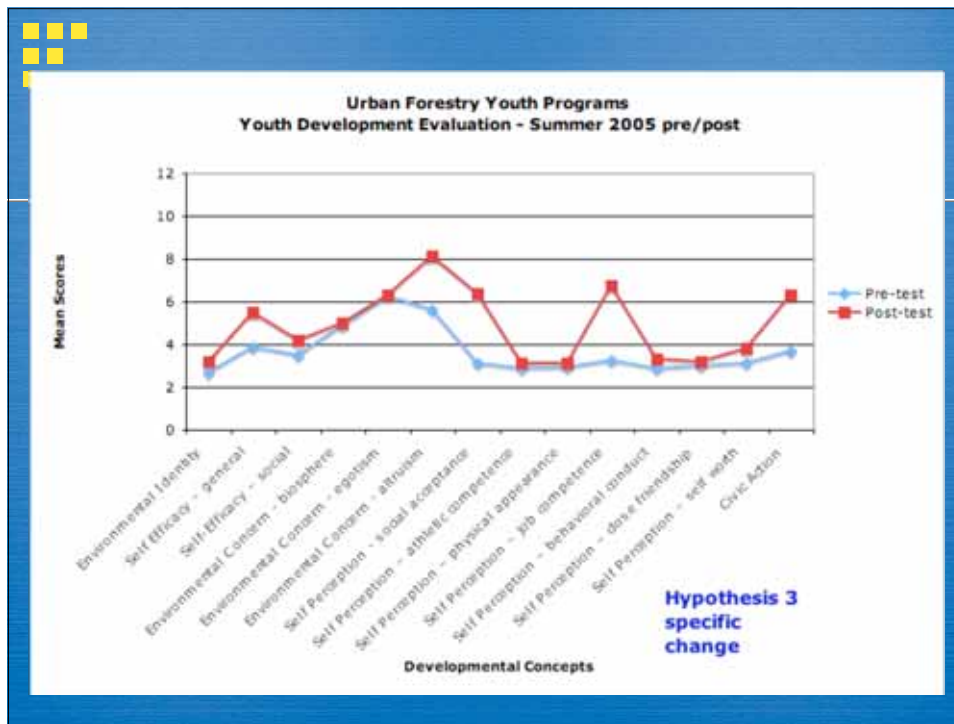
- Environmental Identity
- Self Efficacy (general & social)
- Environmental Concern (biosphere, egotism, altruism)
- Self Perception (social, athletic, physical, job, friendship, behavior, self-worth)
- Civic Action



Analysis Outcomes

- Developmental Concepts
- Survey(s) data
- Statistical tests - means/SDs, correlation, t-Tests, ANOVA
- Hypothesized and Actual







Analysis - Youth Traits

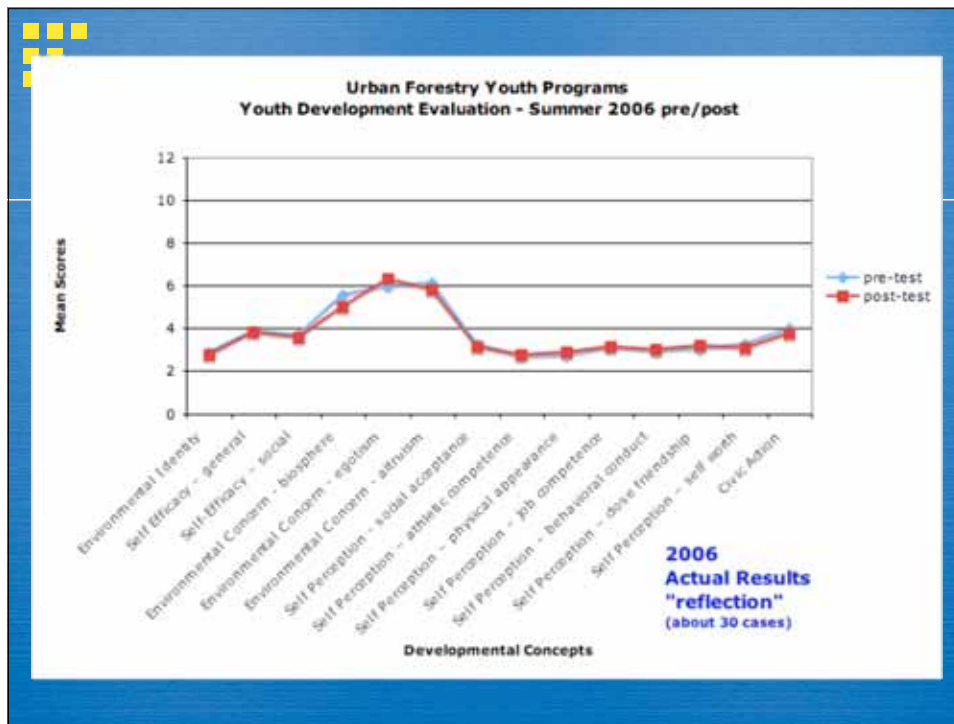
- across programs, 2006 - 1 program
- by age 12-19
- gender
- socio-economic status
- cultural background
- nature program prior experience



Phase III Research

- Pre/post evaluations
 - youth programs - Seattle
 - add reflection exercises

Reflection: to consider a past experience or event and the impact it has had, yielding insight about self and others



Phase I Research

- Phase I: Interviews & Surveys
 - youth program “veterans” in Seattle
 - urban forestry professionals - U.S.



Participants - Interviews/Surveys

- Professionals:
 - snowball sample
 - 28 “minority” individuals, throughout U.S.
- Youth
 - directed sample
 - 26 inner city, Seattle metro region
 - 14-18 age



Nature Program Activities

Main Activity	Pros %s (n=26)	Youth %s (n=26)	% difference
Vegetation/Ecosystem Enhancements	42%	85%	-42%
Structures & Construction	15%	50%	-35%
Litter and Clean Up	0%	19%	-19%
Urban Greening & Horticulture	15%	12%	4%
Nature Reflection/ Appreciation	8%	0%	8%
Informal Experiences	12%	0%	12%
Leadership Experience	23%	4%	19%
Agricultural Education	23%	0%	23%
Unique Program Experience	27%	0%	27%
Outdoor Recreation	31%	4%	27%
Structured Education	54%	12%	42%

pros recalled multiple experiences - > 100%

Memorable Program Aspects

Memorable Aspects	Pros %s (n=27)	Youth %s (n=26)	% difference
Stewardship & Giving Back	7%	15%	-8%
Outdoor Recreation & Physical Activity	17%	23%	-6%
Personal Development	3%	8%	-4%
Social Dynamics	66%	58%	8%
Nature Identity & Appreciation	21%	8%	13%
Sense of Achievement	21%	8%	13%
Leadership & Opportunity	21%	8%	13%
Teachers & Mentors	34%	4%	31%
Learning & Discovery	34%	4%	31%

multiple responses per person > 100%

Career Choice Influences

Career Choice Influences	Pros %s (n=28)
Family Dynamics	18%
Revealed Social Concerns	21%
Nature Solace & Joy	25%
Professional Modeling	25%
UF as Unique Professional Niche	29%
Nature Comfort & Affinity	36%
Satisfactions & Aesthetics	39%
Develop Aptitudes, Interests & Abilities	61%

multiple responses per person > 100%



Conclusions

- Teen years - volatile or stable?
- Multiple & diverse experiences = environmental identity & personal development
- Not just learning, competence! in social setting



Conclusions - Youth Programs

- coordinated series of opportunities
- across collaborative organizations
- across place and life cycle
- landscape/regional scale of programs vs. “random acts of nature”